ABSTRACT OF THE DISCLOSURE

An exposure method is disclosed, which comprises preparing a first mask in which a size of a mask pattern is measured in advance, calculating a first exposure quantity to be applied to the first mask to provide a first resist pattern by using the first mask, simulating optical intensity distributions on a wafer in a case where the first mask is used and an optical intensity distribution on the wafer in a case where a second mask is used, a size of a mask pattern of the second mask being measured in advance, calculating a difference in optical intensity between the first mask and the second mask from the simulated optical intensity distributions, and calculating a second exposure quantity to be applied to the second mask to provide a second resist pattern, from the first exposure quantity and the difference in optical intensity.